#### STAGES OF CERTIFICATION

#### Stage 1: Preliminary Self-Certification (attached checklist)

School divisions certify that they are ready to meet the goals of the Standards of Learning (SOL) Technology Initiative by affirming that they have completed the *Required Elements* of the checklist. Upon submission of the checklist, school divisions are free to seek reimbursement from 2001 funds for expenditures made in middle schools. School divisions that choose to self-certify are still responsible for all expenditures to ensure that high schools meet Stage 2 certification.

#### Stage 2: Technical Certification

School divisions will successfully complete a technical certification program that tests the capacity of the high school and division network. Upon completion, school divisions are free to seek reimbursement from 2002 funds for expenditures made in middle schools. School divisions that are unsuccessful in achieving technical certification should plan to use 2002 funds to purchase the required technology until they successfully complete the program. Achieving technical certification may require that school divisions implement one or more of the **Best Practices** in the *Architectural Guidelines*. Technical Certification procedures will be made available in Fall, 2001.

#### Alternative to Stages 1 and 2:

School divisions may contract directly with NCS Pearson at a "state contract" price to obtain readiness certification. Contract pricing will vary according to the number of schools assessed. School divisions may use state Technology Support Personnel funds for this purpose. For those school divisions that choose this alternative, NCS Pearson will provide a pass/fail report that includes recommendations for improving the high school infrastructure. School divisions that achieve a "pass" may seek reimbursement from 2001 and 2002 funds for middle school expenditures. More information on this Alternative will be provided by Fall, 2001.

#### Stage 3: Preparedness Checklist

School divisions will complete a preparedness checklist that ensures stability of the high school and division network not more than 96 hours prior to each online testing administration. The Preparedness Checklist will be available in Fall, 2001.

#### NOTES:

All Stages of certification must be completed prior to high school online test administration.

# Self-Certification Checklist INSTRUCTIONS

The self-certification checklist is based on the "SOL Technology Initiative Architectural Guidelines for High School Readiness." School division personnel are strongly encouraged to thoroughly review the guidelines prior to completing the self-certification checklist. The guidelines and other helpful information on the SOL Initiative may be found at:

http://www.pen.k12.va.us/VDOE/Technology/soltech/soltech.html.

The self-certification checklist may be completed at any time, but should only be submitted to the Department of Education when **all** of the **Required Elements** of the checklist have been satisfied. School divisions are strongly encouraged to implement the **Best Practices** as well.

A hard copy of the checklist with original signatures must be submitted to the Department of Education prior to seeking reimbursement of 2001 funds for middle school expenditures. All signatures are required. Please keep a hard copy of the signed checklist for your records. Submit the completed checklist and signature page to:

Sarah J. Susbury Virginia Department of Education Office of Information Technology, 22nd Floor P.O. Box 2120 Richmond, VA 23218

## **Self-Certification Checklist**

AWARENESS AND PLANNING - Required Elements		
A. The school division technology coordinator has reviewed the Architectural Guidelines for High School Readiness and has verified compliance at each high school in the division.	O yes O no	
<b>B.</b> The school division technology coordinator, the school division SOL Technology Initiative project manager, and the division director of testing have met at least once to discuss the technology and assessment aspects of online SOL testing.	○ yes ○ no	
C. All high school principals, building level technology coordinators and building level assessment coordinators have been briefed on the initiative.	O yes O no	
INFRASTRUCTURE - Required Ele	ements	
A. The testing locations in each high school have been evaluated to ensure that sufficient electrical outlets and network jacks are available.	O yes O no	Architectural Guidelines Section 2.1
<b>B.</b> All wireless technology is Wired Equivalent Protocol (WEP) compliant.	○ yes ○ no	Architectural Guidelines Section 2.1
INFRASTRUCTURE - Best Prac	tices	
A. New cable installations comply with appropriate building codes.	O yes O no	Architectural Guidelines Section 3.1
<b>B.</b> Electrical surge suppression is installed on all copper cabling.	O yes O no	Architectural Guidelines Section 3.1
C. All cabling and connecting hardware has been tested and certified by the vendor or cabling contractor.	○ yes ○ no	Architectural Guidelines Section 3.1
<ul><li>D. Thin net cabling (10Base-2) has been replaced with Category</li><li>5e (or better) unshielded twisted pair (UTP) cable.</li></ul>	O yes O no	Architectural Guidelines Section 3.1
E. New cable installations after August 1, 2001 use Category 5e unshielded twisted pair.	O yes O no	Architectural Guidelines Section 3.1
F. Backbone cables after August 1, 2001 are fiber optic.	○ yes ○ no	Architectural Guidelines Section 3.1
G. Redundant cables installed after August 1, 2001 have been installed along a separate path.	○ yes ○ no	Architectural Guidelines Section 3.1
H. Telephone access is available in each testing location in each high school.	○ yes ○ no	Architectural Guidelines Section 3.1

## **Self-Certification Checklist**

INFRASTRUCTURE - Best Practices (  I. Wireless technology implementations utilize the highest	Continued)		
available transmission rate, and wireless LAN's are segmented as much as possible.	○ yes ○ no	Architectural Guidelines Section 3.1	
J. Wireless LAN implementations utilize the highest number of WEP keys possible and / or practical and ensure the keys used are changed from their default values.	O yes O no	Architectural Guidelines Section 3.1	
K. Virtual Private Network (VPN) software is used to ensure proper authentication of wireless devices and/or users.	O yes O no	Architectural Guidelines Section 3.1	
COMPUTERS/PRINTERS - Required	Elements		
A. A maximum ratio of five students to one computer has been achieved in each high school.	O yes O no	Architectural Guidelines Section 2.2.1	
<b>B.</b> Each computer counted for the above ratio is either: a) Pentium 166MHz or better, 32MB RAM, 800x600 video resolution,			
standard keyboard and pointing device, or b) PowerPC/PowerMac 200Mhz or better with 32MB RAM, or iMac,	O yes O no	Architectural Guidelines Section 2.2.2	
G3 or better with 48MB RAM, 800x600 video resolution, standard keyboard and pointing device.		Occitor 2.2.2	
C. The client operating system on each computer counted for the above ratio is either: a) Windows 95, 98, NT or 2000, or b) Mac OS 7.6.1 or higher.	O yes O no	Architectural Guidelines Section 2.2.3	
D. The high school technology contact has been instructed in a) shutting off the screen saver and b) removing/disabling the Macintosh control strip.	O yes O no	Architectural Guidelines Section 2.2.3	
COMPUTERS/PRINTERS - Required Elements (Continued)			
<b>E.</b> Each computer counted for the above ratio is Internet-connected, and runs Netscape Navigator version 4.0.6 or higher		Architectural	
(excluding version 6.x) or Internet Explorer version 4.01 service pack 2 or higher.	O yes O no	Guidelines Section 2.2.4	
F. A graphics enabled printer is available for printing test tickets (color is not required).	O yes O no	Architectural Guidelines Section 2.2.6	
COMPUTERS/PRINTERS - Best Practices			
A. Desktop computers are plugged into surge suppression devices.	O yes O no	Architectural Guidelines Section 3.2	
<b>B.</b> Essential software applications and device drivers are up-to-	O yes O no	Architectural Guidelines	

## **Self-Certification Checklist**

MUDE ADEA METIMODIC D LEI		
WIDE AREA NETWORK - Required I	Elements	
A. Each high school has a network connection to the Internet		Architectural
that is not over-allocated (see guidelines for minimum speed	O yes O no	Guidelines
requirements).		Section 2.3
<b>B.</b> A firewall is installed between the school or division network	O yes O no	Architectural
and the Internet.	O yes O no	Guidelines Section 2.4
and the internet.		Section 2.4
		Architectural
<b>C.</b> Client computers and infrastructure devices are configured to	O yes O no	Guidelines
handle SSL traffic.		Section 2.4
D ID filters are configurable to open to apositic ID addresses (to	O yes O no	Architectural
<b>D.</b> IP filters are configurable to open to specific IP addresses (to	O yes O no	Guidelines
be provided at a later time).		Section 2.4
WIDE AREA NETWORK - Best Pra	ctices	
A. All traffic is segmented and routed using routers, switches or		
enhanced firewalls (traffic is not routed using network servers	O yes O no	Architectural Guidelines
or software applications).	0 ,00 0	Section 3.3
, , , , , , , , , , , , , , , , , , , ,		
		Architectural
B. Web-caching is installed (note: test content cannot be	O yes O no	Guidelines
cached).		Section 3.3
LOCAL AREA NETWORK - Best Pr	actices	
A. TCP/IP is the standard network protocol. Unneeded protocols		
and services have been removed from servers and	O yes O no	Architectural
workstations.	0 900 0 110	Guidelines Section 3.4
WORKStations.		Section 5.4
		Architectural
B. Private IP addressing is in use and a documented	O yes O no	Guidelines
naming/addressing scheme is in place.		Section 3.4
	O yes O no	Architectural
C. Local DNS services are implemented.	O yes O no	Guidelines Section 3.4
		Section 3.4
		Architectural
D. DHCP is in use.	yes   no	Guidelines
	0, 0	Section 3.4
		Architectural
E. All Token Ring installations have been migrated to Ethernet.	O yes O no	Guidelines
		Section 3.4

#### **Self-Certification Checklist**

LOCAL AREA NETWORK - Best Practices (Continued)		
F. Shared hubs have been replaced with 10/100 Ethernet Switches.	O yes O no	Architectural Guidelines Section 3.4
<b>G.</b> There is an up-to-date diagram of the high school network infrastructure.	O yes O no	Architectural Guidelines Section 3.4
H. Network administrators have a mechanism for managing the network and monitoring performance.	O yes O no	Architectural Guidelines Section 3.4
NETWORK EQUIPMENT/SERVERS - Best Practices		
Network servers are regularly backed up. Backups are periodically verified by restoring.	O yes O no	Architectural Guidelines Section 3.5
<b>B.</b> File servers and other network devices are plugged into uninterruptible power supplies (UPS) and surge suppression devices.	O yes O no	Architectural Guidelines Section 3.5
C. Wiring closets and server rooms are secure, climate-controlled and clean.	O yes O no	Architectural Guidelines Section 3.5
<b>D.</b> Essential software applications and device drivers are up-to-	O yes O no	Architectural Guidelines

PLEASE REMEMBER TO ATTACH THE COMPLETED SIGNATURE PAGE. **THANK YOU!** 

date.

Section 3.5

## Self-Certification Checklist Signature Page

A hard copy of the Self - Certification Checklist with original signatures must be submitted to the Department of Education. Each of the four signatures are required (one individual may hold more than one of the listed positions and should sign under each associated title).

Please keep a hard copy of the signed checklist for your records. <u>Submit the completed checklist and signature page to</u>:

Sarah J. Susbury
Virginia Department of Education
Office of Information Technology, 22nd Floor
P.O. Box 2120
Richmond, VA 23218

School Division Number/Name:	
Superintendent Signature:	
	_ Date:
Division Director of Testing Signature:	
	_ Date:
Division Technology Director Signature:	
	_ Date:
SOL Technology Initiative Project Manager Signature:	
	_ Date: